Application Form
Ninth Annual New Hampshire Governor's Award For Pollution Prevention

Business: Manufacturers, Commercial Services, Office Buildings
Organization: Environmental, Community, Non-Profit Groups, Institutions (Schools, Hospitals), Public Agencies, Municipalities

Business or Organization: **Green Medical Supplies**

Contact Name & Title: **Ms. Kathy Smith, Environmental & Safety Specialist**

Street Address: **20 Green Lane**

City: **Concord** NH Zip: **03302** SIC/NAICS: **3231**

Telephone: **(603) 555-0000** Fax: **(603) 555-0001** Email: **ksmith@green.com**

Website: **wwwgreenmedicalsupplies.com** Number of Employees at this address: **275**

Description of Business or Organization:
Green Medical Supplies is a manufacturer of medical supplies for the healthcare industry.

Description of Pollution Prevention Project or Program:
Green Medical Supplies has five on-going pollution prevention projects.

I. **Initiated a water recycling project in 1998, resulting in a 55% annual reduction in water use.**
II. **Instituted a facility mercury swap and purchase policy in 2001 that included swapping out all mercury thermometers in production and research labs, and sponsoring a community mercury thermometer collection event.**
III. **Implemented a "slides for schools" program where unused, good quality slides are sent to NH schools and the NH Donation Depot, instead of sending the slides for recycling.**
IV. **Implemented an energy conservation program that included re-lamping the facility with a more energy efficient lighting system and upgrading the air conditioning units to a Seasonal Energy Efficiency Rating (SEER).**
V. **Eliminated the purchase, use and disposal of a cleaning solvent used in preparing microscope slides for sale.**

Applications are due by January 24, 2003.

Applications may be submitted electronically (cschwalbe@des.state.nh.us) or through the mail.
Please submit completed application and relevant attachments to:
New Hampshire Department of Environmental Services
Pollution Prevention Program, Attn: Colleen Schwalbe
P.O. Box 95, 6 Hazen Drive
Concord, NH 03302-0095

Please view the **N.H. Governor's Award web page** at www.des.state.nh.us/nhppp/nh01003.htm for frequently asked questions, application examples, and other relevant information.
The Ninth Annual Governor's Award for Pollution Prevention Judges' Debate will be held in February 2003. Applicants will be notified after a regulatory check, to be conducted in March 2003.

It is important to completely answer all sections of this application that apply to your project. A comparison will be made of all applications received, based upon the information submitted. Should we require any further information, NHPPP will contact you. Please type or print neatly!

Section I. Project Description

Note: "Project" means a specific project, an entire program, or an outreach/education activity.

Project title: **Pollution Prevention (P2) Program at Green Medical Supplies**

Project description:
Project I. Water Recycling Project:
In 1998, a water filtration and recycling system was installed that enabled all glass grinding water and other production water to be filtered through a reverse osmosis (RO) system and re-circulated back into production.

Project II. Mercury Thermometer Swap:
This project was undertaken in 2001 to remove and replace all mercury thermometers in the labs and research rooms at Green Medical Supplies. As a community service project, Green Medicals Supplies sponsored a community mercury thermometer collection event.

Project III. Slides for Schools Program:
This project was designed to take glass slides that are unusable for our business and customers, and donate these slides to schools and non-profit organizations.

Project IV. Energy Conservation:
A re-lamping of the facility with a more energy efficient lighting system was undertaken, and also an upgrade of air conditioning units to SEER.

Project V. Elimination of Slide Cleaning Process:
This project eliminated the process of cleaning slides that have been stored in the warehouse for sale, thus eliminating the use of a toxic cleaning solvent.

Why was the project undertaken?

Many of these pollution prevention projects were undertaken at the direction of Green Medical Supplies management team to lower overhead costs. Specifics to why each project was undertaken follow.

Section I. Project Description (continued)

Project I. Water Recycling:
This project was undertaken to reduce the amount of water used at the Green Medical Supplies facility. Additionally, by adding filtering technology to this recycling effort, the discharge water is now much cleaner (reduced filtered solids), before it is discharged to the local publicly owned treatment works facility (POTW).

Project II. Mercury Swap:
This project was undertaken to remove and lessen sources of mercury at the facility and the community, in order to lessen the impact of mercury on the environment and the State of New Hampshire. By removing mercury thermometers from the facility and the community, it reduced the likelihood of accidental thermometer breakage and subsequent cleanup costs, as well as the potential impacts to human health and the environment.

Project III. Slides for Schools Program:
The slides for schools program was undertaken at the suggestion of a production line employee. The employee suggested that, instead of recycling the slides (which uses energy), schools could use the slides for instructional purposes.

Project IV. Energy Conservation:
This was undertaken as a recommendation of our energy conservation team to reduce electricity costs for the facility. A re-lamping of the facility and upgrading of air conditioning units will save the company electricity costs over time.

Project V. Elimination of Slide Cleaning Process:
Elimination of the cleaning solvent for slide preparation was undertaken when the production line supervisor researched the process and determined the company was performing an unnecessary step in preparing slides for sale. By eliminating the use of this solvent, it also eliminated the associated costs of the raw material and hazardous waste disposal costs.

Project contact (if different):
Ben Davis is the best contact for the Slides to Schools program. All remaining inquiries should be directed to Kathy Smith.

Section II. Adherence to Pollution Prevention Hierarchy

Describe how the project fits within the P2 hierarchy strategies (eliminate, reduce volume, reduce toxicity, reuse, recycle). Why was this strategy selected over other options?

Project I. Water Recycling:
The water recycling effort was chosen as the best method to reduce the amount of water that the facility used each year. Through the efforts of a variety of departments, including engineering, safety, and maintenance, a complex water filtering system and recycling program was initiated.

Project II. Mercury Thermometer Swap:
The facility mercury thermometer swap reduced the possibility of a mercury thermometer breakage and subsequent spill at the facility. The mercury thermometer collection event also decreased the potential for mercury to enter residential homes and, potentially, the environment. This P2 strategy was selected as it removed mercury thermometers from both the facility and the local community.

Project III. Slides for School Program:
The slides for schools program was a way to reduce the amount of glass recycled, and use these slides as a beneficial "product" for non-profit organizations. Also, in an indirect way, this project saved energy as recycling the glass sides would have required energy. This P2 strategy was selected to reduce the amount of products being recycled, as well as to continue the beneficial use of our products.

Project IV. Energy Conservation:
An energy conservation team was formed in 2001 to evaluate energy conservation opportunities to reduce operating costs at the facility. A recent project included re-lamping our facility and upgrading air conditioning units. This P2 strategy was selected to reduce long-term facility energy costs. However, by conserving electrical power, our facility reduces the amount of fossil fuels burned to generate electricity, thereby reducing air pollution.

Project V. Elimination of Slide Cleaning Process:
Elimination of a raw material that creates a hazardous waste is the highest step in the P2 hierarchy strategy. The associated cost for hazardous waste disposal, as well as reducing air emissions of a regulated air toxic compound, provides Green Medical Supplies with the best strategy for pollution prevention.

Section III. Measurement of Success

Include correct unit of measurement in all applicable areas of this section.

Reduction of a Waste or Raw Material
Did this project reduce waste (waste generated or raw materials utilized)? **XX** Yes __ No
If yes, please provide past quantity of waste generated/ raw materials utilized:
Project III: By donating slides to schools, our facility reduced amount of waste recycled.
Project V. By eliminating a cleaning solvent, our facility eliminated a process raw material.

Current quantity of waste generated/raw materials utilized:
No slides are recycled.
No solvent is utilized for cleaning.

Quantity of waste/raw materials reduced: **600 boxes of slides per year, and 220 gallons of cleaning solvent per year.**

Estimated Cost Savings/Year:
$1,000 per year (associated purchase cost of cleaning solvent and hazardous waste disposal costs).

Payback period (real or estimated): **Less than 2 months.**

Reduction in Air Emissions
Did this project reduce air emissions? **XX** Yes ___No
If yes, please provide past amount of air emissions generated: **Not measured.**
Reduced air emissions by eliminating cleaning solvent, thereby eliminated a regulated air toxic compound from our facility.

Current amount of air emissions generated: **Not able to quantify**

Amount of air emissions reduced: **Not able to quantify.**

Estimated Cost Savings/Year: **Not able to quantify.**
Payback period (real or estimated): **Not able to quantify.**

Reduction in Energy Usage
Did this project conserve or save energy? **XX** Yes ___No
If yes, please provide past quantity of energy utilized: **Not able to quantify**.

Current quantity of energy utilized: **Not able to quantify whole facility.**

Quantity of energy saved: Project IV: **Energy conservation 421852 kilowatt hours of electricity.**
Estimated Cost Savings/Year: **$12,000/year.**
Payback period (real or estimated): **3 years (estimated).**

Section III. Measurement of Success (continued)

Reduction in Water Usage:
Did this project conserve water? **XX** Yes ___No
If yes, please provide past quantity of water utilized: **85,000 gallons per day.**

Current volume of water utilized: **37,000 gallons per day.**

Volume of water conserved as a result of this project: **48,000 gallons per day, or 17 million gallons of water per year.**

Estimated Cost Savings/Year: **$80,000 per year in water costs saved.**

Payback period (real or estimated): **1.5 years (estimated).**

Reduction in Other Measures
Please describe any other measures used, (i.e., time, labor, energy, raw materials, and training, as well as the costs for any raw material and disposal). **Our company had higher labor costs associated with the RO system, however, we cannot measure these costs. Our facility reduced associated employee time for meeting all environmental regulatory requirements associated with the cleaning solvent, which included calculating potential air emissions, manifesting disposal forms and disposal fees.**

Our facility did incur a one time cost in swapping out mercury thermometers with alcohol types, and sponsoring the community mercury thermometer collection event.

Did these measures result in cost savings? **XX** Yes **(employee time)** No
Estimated Cost Savings/Year (include hidden costs of time, labor, energy, raw materials, and training, as well as any raw material and disposal costs).
Cannot calculate.

For Organizations Only:

Please provide any relevant information on turnout for workshops/training/seminars/activities.

Please note any increase in requests for materials on information. (From whom and what type of requests?)

Section IV. Commitment and Leadership in Pollution Prevention

Explain your management commitment to pollution prevention and overall environmental excellence. Examples include: employee training, incentive programs, awards, planning meetings, a pollution prevention policy, an environmental purchasing policy, or supply chain collaboration.

Our company is committed to pollution prevention primarily through the purchasing and procurement of materials and capital expenses. Before any high cost item is purchased as a capital expense, our company performs a detailed review of the associated energy and waste disposal costs, as well as any increased water costs. Through this process, the environmental costs are directly added to the retail cost of this additional equipment. Management also participates in monthly audits, corrective actions, annual environmental policy training and seminars. Our energy conservation team and safety committee meet quarterly to review projects that have been undertaken and continuous ways for improvement.

Explain how P2 philosophy has become incorporated into a company-wide philosophy. If available, please attach a copy of your mission statement, policy or vision on pollution prevention.

A P2 philosophy is evident at Green Medical Supplies, and is listed as one of the primary goals of the organization (see attached company mission statement). Even recycling, although not a P2 strategy, is listed in the Green Medical Supplies employee manual: "Green Medical Supplies will accomplish waste minimization by relying on recycling all possible waste streams. These include wood, paper, glass, scrap metal and fluorescent bulbs." Currently 65% of our production waste is recycled. Attached for your review are copies of the Green Medical Supplies Safety Manual and our Energy Conservation Policy.

Does the facility have an environmental management system? ___Yes **XX** No

Our safety committee is researching the possibility of formulating an environmental management system, based upon the level of commitment and work we have already pursued in this area. Implementation of an environmental management system would improve management support, increase employee awareness of pollution prevention practices and streamline all of our environmental programs.

Is your facility ISO 14001 certified? ___Yes **XX** No

Our company is currently pursuing the possibility of ISO 14001 certification. This would enhance our environmental business practices and give us a competitive edge in the marketplace. We are noticing that the medical supply industry is expecting that companies become ISO 14001 certified as a service to their customers.

If yes to either of these questions, please explain your reasons for implementation.

Section V. Benefits to Community and Employees

Describe any benefits of this project or program to the community.
A direct benefit to the local aquifer is happening due to an increased conservation of local water resources. By donating microscope slides to schools, school children in NH are benefiting from an item that a school might need to normally purchase. By sponsoring a mercury thermometer collection event, 100 mercury thermometers were collected from the community and disposed of properly.

The slides for schools program is unique in that what would be product to be sent to a road paving facility is actually benefiting the students and teachers of New Hampshire. It is a creative way to re-use a product of no use to our company in a beneficial way.

Have community relations improved as a result of this project? **XX** Yes ____ No
If yes, please describe.
New and improved communications have opened up with the local schools and non-profit organizations as a result of the slides for school program. The mercury thermometer collection event greatly improved community relations as citizens of the community were eager to remove the thermometers form their home, and not have to wait until the next scheduled community household collection event, which was 9 months away.

Have improvements to employees (i.e., improved worker's safety, increased production and morale) resulted from this project? **XX** Yes ____ No
If yes, please describe.
By reducing mercury sources at the facility, there is currently a minimal chance of mercury exposure at the workplace from a broken mercury thermometer. Through our various environmental committees, our employees recognize our commitment to helping the environment and know that we are not just trying to affect the bottom line. Employee incentives are offered annually for employees who make pollution prevention suggestions that are implemented. Our leading example is the slides schools program.

Section VI. Additional Information

Please provide, if necessary, any additional information not addressed in this application. You may also attach to this application any hardcopies (i.e., brochures, press releases or web addresses) that you would like included at the Judges' Debate.
Attached please find our company's mission statement, web address, safety manual and energy conservation policy to assist in your review of our application. To learn more abut our company, visit our web site www.greenmedicalsupplies.com to view our product line.